

A SILICONE-RUBBER PLATE USED IN AN OVEN

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a silicone-rubber plate used in an oven,
5 particularly to one having a projecting circumferential edge, and a metal
bar contained lengthwise in the projecting circumferential edge, at least
two pairs of upper ears and of lower ears formed on an outer vertical
surface and respectively provided with a through hole for securing two
ends of the support bars propping the lower side of the silicone-rubber
10 plate. Thus, the plate may not disfigure or has its intermediate portion
drooping down by means of the metal bar and the support bars propping
to keep the plate flat enough so as to prevent soup in the plate from
overflowing, and to keep baked food intact thereon without altering its
appearance and falling out of the plate.

15 2. Description of the Prior Art

A traditional silicone-rubber plate used in an oven 1 shown in Fig.
1 is very soft to easily disfigure, crack, break, etc., so that the material
such as dough being baked thereon may be deteriorated in its
appearance, or fall out of the plate. And some traditional silicone-rubber
20 plate may have a thick circumferential projecting edge 10 or plural ribs 11
formed on its outer surface for reinforcing the plate. However, these
additional structures are not so effective to reinforce the traditional plate to
overcome the disadvantages mentioned.

SUMMARY OF THE INVENTION

25 The main objective of the invention is to offer a silicone-rubber

plate used in an oven, which can maintain its shape flat and not disfigure when it is held up manually so as to prevent soup in the plate from overflowing and keeping the appearance of the food such as bread baked intact or hampering the food from falling out of the plate.

5 A first feature of the invention is a metal bar contained in a projecting circumferential edge of a silicone-rubber plate.

 A second feature of the invention is an inlet formed in the circumferential edge for the metal bar to be inserted therein, and a securing member provided at the inlet for securing the metal bar stably.

10 A third feature of the invention is at least two pairs of upper ears and of lower ears formed in an outer vertical surface and each upper and lower ear provided with a through hole, and at least two support bars provided crossing with each other for propping the lower side of the plate and two ends of the two support bars are hooked respectively with the
15 upper and the lower ears.

BRIEF DESCRIPTION OF DRAWINGS

 This invention will be better understood by referring to the accompanying drawings, wherein;

 Figure 1 is a perspective view of a traditional silicone-rubber plate
20 used in an oven;

 Figure 2 is an exploded perspective view of a first embodiment of a silicone-rubber plate used in an oven in the present invention;

 Figure 3 is a perspective view of a metal bar contained in a projecting circumferential edge of a silicone-rubber plate used in an oven
25 in the first embodiment in the present invention;

 Figure 4 is a partial cross-sectional view of a support bar combined with a plate body in the first embodiment in the present

invention;

Figure 5 is a perspective view of a metal bar provided in another way in the first embodiment in the present invention; and,

Figure 6 is an exploded perspective view of a second embodiment
5 of a silicone-rubber plate used in an oven in the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A first embodiment of a silicone-rubber plate used in an oven in the present invention, as shown in Figs. 2, 3 and 4, includes an plate body 2, a projecting circumferential edge 20, a metal bar 3 contained in the
10 circumferential edge 20, at least two upper ears 21 and two lower ears 22 provided facing each other on an outer vertical circumferential surface and respectively having a through hole 210, 220, plural ribs 23 formed spaced apart on the outer vertical circumferential surface for strengthen the plate body . Further, the plate has plural U-shaped support bars 4
15 made of metal, which respectively have a support area 41 and two combining ends 41 with a recess 42 in its intermediate section.

In assembling, firstly, the support bars 4 have their combining ends 41 inserted in the through holes 210 and 220 of the upper and the lower ears 21 and 22, with the recess 42 located between each upper ear 21
20 and each lower ear 22 to secure the metal bars 4 with the plate body 2 and with the support area 40 propping the lower side of the oven body 2, and with the tips of the combining ends 41 sticking in the wall of the plate body 2 near the metal bar 3, as shown in Fig. 3. As the soft silicone rubber has some adhering force to bind the support bars 4, with the metal
25 bars 3 cooperating with the ribs 23, augmenting the stress and the tension in the directions of X and Y axes. Therefore, when a user holds up and moves away the silicone-rubber plate 2 after the food is baked enough,

the oven may not disfigure owing to its softness because of the metal bars 3 functioning as a hard frame and the support bars 4 propping the lower side and the side wall of the plate body 2. In addition, soup in the plate will neither overflow the oven, with the food kept intact without altered in its shape or falling off.

Moreover, the projecting circumferential edge 20 can be provided with an inlet 200 as shown in Fig. 5, to let the metal bar 3 possible to be inserted in the interior of the edge 20.

In addition, Fig. 6 show a second embodiment of a silicone-rubber plate used in an oven, having almost the same structure, except that the ribs 23 further have respectively a straight hole 230 for the combining ends 41 of the support bars 4 to insert therein, and an opening 231 formed in the intermediate section of each rib 23 for the recess 42 of each support bar 4 to stick out, securing the support bars 4 with the plate body 2.

While the preferred embodiments of the invention have been described above, it will be recognized and understood that various modifications may be made therein and the appended claims are intended to cover all such modifications that may fall within the spirit and scope of the invention.